

What is claimed is:

1. An image forming device comprising:

5 a fixing member that performs a fixing operation to fix a developer onto a fixing medium, the fixing member having a surface, the developer having a melting temperature that is a first temperature;

a heater that generates heat to heat the fixing member;

10 a first detecting member that detects a surface temperature of the fixing member;

a driving member that rotates the fixing member;

a contact member that constantly contacts the surface of the fixing member;

15 a controller that controls the heater and the driving member; and

a second detecting member that detects whether or not the surface temperature of the fixing member has dropped below a third temperature after the surface temperature has previously reached a second temperature higher than the first temperature, the third temperature being equal to or
20 higher than the first temperature and lower than the second temperature, wherein

the controller controls the heater to start generating heat at a predetermined timing;

25 if the surface temperature of the fixing member

detected at the predetermined timing by the first detecting member is lower than the third temperature, the controller controls the driving member to start rotating the fixing member after the surface temperature of the fixing member exceeds the second temperature; and

if, at the predetermined timing, the second detecting member detects that the surface temperature of the fixing member has not dropped below the third temperature after the surface temperature has previously reached the second temperature, the controller controls the driving member to start rotating the fixing member.

2. The image forming device according to claim 1, wherein the second temperature is a surface temperature of the fixing member at which a developer adhering to the contact member melts when the fixing member whose surface temperature is lower than the first temperature is heated by the heater.

3. The image forming device according to claim 2, further comprising a plurality of contact members constantly contacting the surface of the fixing member, wherein the second temperature is a surface temperature of the fixing member at which a developer adhering to one of the plurality of contact members having the largest thermal capacity melts when the fixing member whose surface temperature is lower than the first temperature is heated by the heater.

4. The image forming device according to claim 1,
wherein the controller controls the heater to maintain the
surface temperature of the fixing member at a fixing
temperature that is higher than the second temperature
5 during the fixing operation, and the controller controls the
heater to maintain the surface temperature of the fixing
member at the second temperature during a non-fixing
operation.

5. The image forming device according to claim 1,
10 wherein the third temperature is equal to the first
temperature.

6. The image forming device according to claim 1,
wherein the controller executes a warm-up operation in
preparation for a printing process.

15 7. The image forming device according to claim 1,
wherein if the surface temperature of the fixing member
detected at the predetermined timing by the first detecting
member is lower than the second temperature and when the
second detecting member detects that the surface temperature
20 of the fixing member has dropped below the third temperature
after the surface temperature has previously reached the
second temperature, the controller controls the driving
member to start rotating the fixing member after the surface
temperature of the fixing member exceeds the second
25 temperature.

8. The image forming device according to claim 1,
wherein if the surface temperature of the fixing member
detected at the predetermined timing by the first detecting
member is higher than the third temperature, the controller
5 controls the driving member to start rotating the fixing
member immediately after the controller controlled the
heater to start generating heat.

9. An image forming device comprising: ✓

a fixing member that performs a fixing operation to
10 fix a developer onto a fixing medium, the fixing member
having a surface, the developer having a melting temperature
that is a first temperature;

a heater that generates heat to heat the fixing
member;

15 a first detecting member that detects a surface
temperature of the fixing member;

a driving member that rotates the fixing member;

a contact member that constantly contacts the surface
of the fixing member;

20 a controller that controls the heater and the driving
member; and

a second detecting member that detects whether or not
the surface temperature of the fixing member has dropped
below a third temperature after the surface temperature has
25 previously reached a second temperature higher than the

first temperature, the third temperature being equal to or higher than the first temperature and lower than the second temperature, wherein

the controller controls the heater to start generating
5 heat at a predetermined timing;

if the surface temperature of the fixing member detected, at the predetermined timing, by the first detecting member is lower than the third temperature, the controller controls the driving member to start rotating the
10 fixing member after a first predetermined time has elapsed after the surface temperature of the fixing unit reached the third temperature by controlling the heater; and

if, at the predetermined timing, the second detecting member detects that the surface temperature of the fixing
15 member has not dropped below the third temperature after the surface temperature has previously reached the second temperature, the controller controls the driving member to start rotating the fixing member after a second predetermined time has elapsed after the controller
20 controlled the heater to start generating heat, the second predetermined time being shorter than the first predetermined time.

10. The image forming device according to claim 9, wherein the controller controls the driving member to start
25 driving the fixing member immediately after the controller

controls the heater to start generating heat if, at the predetermined timing, the second detecting member detects that the surface temperature of the fixing member has not dropped below the third temperature after the surface temperature has previously reached the second temperature and if the predetermined timing is within a third predetermined time after the surface temperature of the fixing member dropped below the second predetermined temperature.

10 11. The image forming device according to claim 9, wherein the second temperature is a surface temperature of the fixing member at which a developer adhering to the contact member melts when the fixing member whose surface temperature is lower than the first temperature is heated by the heater.

15 12. The image forming device according to claim 11, further comprising a plurality of contact members constantly contacting the surface of the fixing member, wherein the second temperature is a surface temperature of the fixing member at which a developer adhering to one of the plurality of contact members having the largest thermal capacity melts when the fixing member whose surface temperature is lower than the first temperature is heated by the heater.

20 13. The image forming device according to claim 9, wherein the controller controls the heater to maintain the

surface temperature of the fixing member at a fixing temperature that is higher than the second temperature during the fixing operation, and the controller controls the heater to maintain the surface temperature of the fixing member at the second temperature during a non-fixing operation.

14. The image forming device according to claim 9, wherein the third temperature is equal to the first temperature.

10 15. The image forming device according to claim 9, wherein the controller executes a warm-up operation in preparation for a printing process.